# **State of Tennessee**

# Information Systems Planning Guidelines

FY 2004/2005 through 2006/2007

Prepared by
Office for Information Resources, IT Planning and Research
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# **Table of Contents**

PREFACE TO THE INFORMATION SYSTEMS PLANNING (ISP) GUIDELINES  Business Driven Technology Strategy	
Funded and Unfunded Projects	3
·	
INFORMATION SYSTEMS PLANNING PROCESS	
INFORMATION TECHNOLOGY ASSESSMENT AND BUDGET COMMITTEE (IT-ABC) PROCESS.  Minimum Requirements for Review	
2004 IT-ABC MEETING DATES	6
SUBMISSION OF THE INFORMATION SYSTEMS PLAN (ISP)	7
SCHEDULE OF MAJOR EVENTS	8
Changes This Year	9
SUMMARY OF THE CONTENTS OF THE PLAN	11
CHAPTER ONE: EXECUTIVE SUMMARY	12
CHAPTER TWO: INFORMATION TECHNOLOGY STRATEGY	13
CHAPTER THREE: INFORMATION RESOURCES MANAGEMENT ISSUES	16
CHAPTER FOUR: INFORMATION TECHNOLOGY PROJECTS	17
CHAPTER FIVE: INFORMATION TECHNOLOGY DISASTER RECOVERY PLAN	21
APPENDIX A: ISP DUE DATES AND ACCOUNT ASSIGNMENTS	24
APPENDIX B: NEW, UNEXPECTED AND REVISED PROJECTS	25
APPENDIX C: STATEWIDE INITIATIVES - GIS FORMAT & DEFINITIONS	26
APPENDIX D: EXAMPLE PROJECT SUMMARY SPREADSHEET	27
APPENDIX E: SMALL PROJECT FORMAT, DEFINITIONS, AND EXAMPLE	28
APPENDIX F: DESKTOP EQUIPMENT REPLACEMENT	31
APPENDIX G: IT DISASTER RECOVERY FORMAT AND DEFINITIONS	32
APPENDIX H: ASSISTANCE INFORMATION  Appendix H (continued): Assistance Information	
APPENDIX I: ENHANCED IT-ABC PROCESS CHART	35
APPENDIX J: INFORMATION TECHNOLOGY STRATEGY REFERENCE MATERIAL	36
APPENDIX K: SHORT FORM INFORMATION SYSTEMS PLAN	39
APPENDIX L: MICROSOFT LICENSING SURVEY INSTRUCTIONS	_

# Preface to the Information Systems Planning (ISP) Guidelines

In 1994, Tennessee Code Annotated was amended to enact into law the organization and composition of the Information Systems Council (ISC) as an executive steering committee within the State's information systems community. Among the duties and responsibilities of the ISC listed in the Tennessee Code Annotated is the requirement to establish effective long-range planning for the State's information management. This was formalized in ISC Policy Number 7.00 - An Information Systems Plan will be prepared annually by each agency. The Office for Information Resources (OIR) will administer the planning process and prepare a Statewide Plan.

Information Systems Plans prepared by agencies define the information technology strategy in place that provides tools for executive management to meet business goals and objectives. OIR also uses information in the plans to support government initiatives in support of the State's strategic direction.

OIR annually publishes a State of Tennessee Information Systems Plan that provides a comprehensive picture of information technology throughout State government. The agency Information Systems Plans serve as the primary source of information for this endeavor. This publication is available on the Internet at the following location: (http://www.state.tn.us/finance/oir/prd/tennplan.htm).

# **Business Driven Technology Strategy**

The highly competitive marketplace for the vast majority of businesses has created a service delivery model that requires attention to the customer and organizational efficiency for survival. This same service delivery model has changed government and in much the same way. The citizen wants government to be just as responsive, innovative, and effective as the private sector businesses with which they deal. The citizen expects quality service at a low cost. The goals and objectives of individual agencies, and government as a whole, must anticipate citizen needs and determine ways to meet those needs in the most cost-effective ways possible. Determination and accomplishment of those goals and objectives is the responsibility of management.

In many ways, the success or failure of a technology staff to accomplish these goals will determine the ability of an agency to successfully use technology to move smoothly and rapidly toward the accomplishment of business goals. One of the primary responsibilities of technology managers is to involve business management, not just in the approval process, but also in the planning and development process. This redefinition of roles has also added the requirement for the technical staff in agencies to be able to explain to non-technical business staff the implications for change in business processes that may be realized through technology deployment. Today, program managers must participate in technology projects in order for them to be successful. Technology projects are expensive, and failures impact not only financial resources but also drain or divert other resources from critical business goals.

# **Funded and Unfunded Projects**

Agencies should carefully review each project and the funding mechanism with the agency's fiscal office before the plan is submitted to the Information Technology Assessment and Budget Committee (IT-ABC) for review. Projects with significant funding requirements should also be discussed with the agency's Finance and Administration budget analyst.

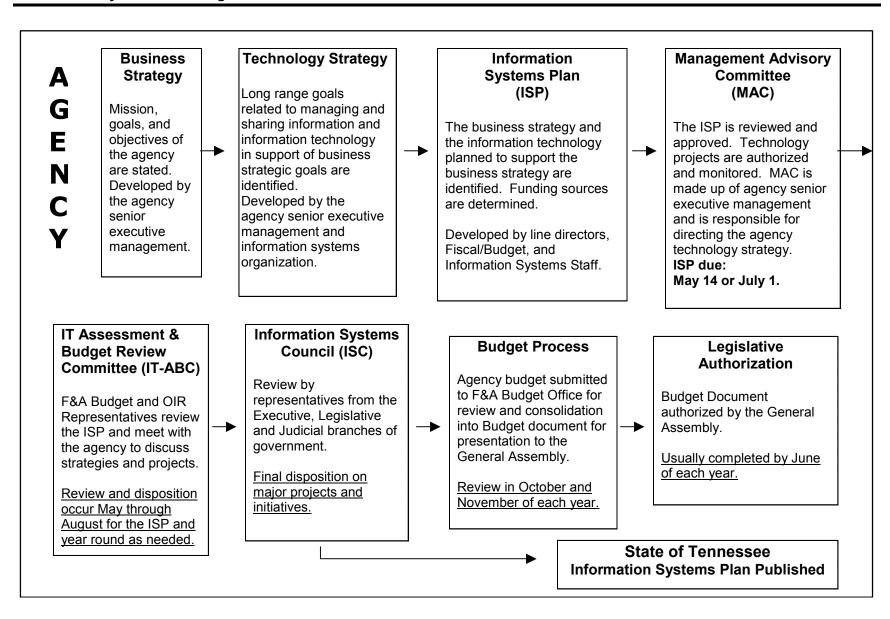
Frequently, a number of Year One projects that are reviewed by IT-ABC each year are unfunded. Some agencies include these projects in Year One to ensure that project approval would be in place should the funds emerge for additional project implementations. It should be noted that procedures are in place for agencies to submit projects to IT-ABC throughout the year (see Appendix B). Therefore, unfunded projects should NOT be included in Year One. In the same way, plans for funding Year Two projects should be consistent with the agency's intended budget request that is foreseen at the time the plan is prepared.

# **Assistance in Plan Development**

The Planning Consultants in OIR IT Planning and Research are available to assist agencies during the planning process. Any questions concerning ISP Guidelines, or planning issues in general, may be directed to the Planning Consultant identified for your agency (see Appendix A).

Appendix (H) identifies Internet/Intranet Web sites that contain information that may be helpful for cost benefit development such as State contracts and OIR service rates. Appendix H also identifies OIR contacts that can provide technical assistance on project initiatives.

# **Information Systems Planning Process**



# Information Technology Assessment and Budget Committee (IT-ABC) Process

In accordance with ISC Policy 7.00, "Information Systems Plans," the IT-ABC was created to address information systems issues with a statewide (corporate) view, to take a strategic view on major technological issues, and to provide a process for monitoring projects' plans and status. The review of Information Systems Plans is an important step in accomplishing these responsibilities. More than 50 individuals in OIR and the Budget Division review plans, in whole or in part. There are multiple purposes for this review:

- Approval or disapproval of Year One projects based upon their contribution to: fulfilling the State's service
  delivery to its citizens; supporting the agency's strategic plan; and adhering to the State's information systems
  architecture, policies and procedures and the resources available.
- Recommendation of Year Two projects for inclusion or exclusion in funding consideration for the next fiscal year. The criteria for consideration are the same as for the Year One review.
- Review of Year Three plans in an attempt to identify long-term needs for information technology resources.
- Review the agency Information Technology Strategy, as outlined in their Business Strategic Plan, to better understand their use of information technology to enhance services delivered.
- Review of the Information Resources Management Issues to develop an understanding of the issues that impact
  the effective and efficient use of information technology in the agency and in the State as a whole. This
  information is important in helping identify issues that not only affect the agency but also the entire information
  systems community in the State. In its role as staff to the Information Systems Council, OIR is then better
  positioned to pursue strategic initiatives to address major issues.
- Overall view of projects across agencies that may be performing similar functions, generating redundant data, and demonstrating a need for sharing data. There is a growing need for sharing data among agencies in order to facilitate better service to the citizens of the State.

After the plans are submitted, IT-ABC members and their staff immediately begin an intensive review of each plan. Meetings with the agency may be scheduled. Prior to this meeting, an agenda detailing questions or concerns is sent to the agency. After discussions with agencies, a disposition memo is sent to the Commissioner, MAC Chair, Fiscal/Budget Officer and IS Director of each agency summarizing IT-ABC action on the agency's Information Systems Plan.

# Minimum Requirements for Review

In order to expedite review of the plans, each plan will be checked for compliance with the planning guidelines before review begins. Plans not conforming to the guidelines in the following areas will be subject to return to the agency for revision before review can take place.

- The agency head and MAC Chair's signatures must be present on the cover sheet of the plan. Their signatures confirm that the agency's technology direction is reflected in the plan and that the specific projects noted are a part of the agency's (current or planned) budget.
- Each Project Proposal must clearly describe the business goal addressed by the project and provide detail in the functional description as to how the business need will be met.
- Each Large Project Proposal in Year One and Year Two must be accompanied by a Cost Benefit Analysis
  document and appropriate Enhanced IT-ABC documentation. CBAs must conform to the Cost Benefit Analysis
  Methodology, and the current CBA2004.xls template, available from the Internet at
  <a href="http://www.state.tn.us/finance/oir/prd/train.html">http://www.state.tn.us/finance/oir/prd/train.html</a>.
- Each Cost Benefit Analysis document must have the following components completed Financial Summary, Risk
  Assessment, Initial Cost Assessment, Operational Cost Assessment, and Benefit Assessment. The funding
  source(s) must be identified for each project in Year One and Year Two on both the Project Proposal and Cost
  Benefit Analysis documents. The Financial Summary must contain <u>up-to-date information</u> on Total Initial Dollars
  spent through March 31, 2004 and Total Initial Dollars projected to be spent between April 1, 2004 and June 30,
  2004.
- The project sponsor and Budget/Fiscal Officer must sign each large project in Year One and Year Two. The Budget/Fiscal Director is confirming by his/her signature that the funding source(s) identified is correct and that Year One funding is in place for the project.

# 2004 IT-ABC Meeting Dates

Dates for the plan review meetings with the IT-ABC and the agencies have been set as follows. Attendees should include the MAC Chair, MAC members, the Budget/Fiscal Officer, and the IS Director. The Commissioner or Executive Officer of the agency is also encouraged to attend. Project sponsors, IS staff, and others may attend as appropriate at the discretion of the agency. Contact Marilyn Illig with OIR IT Planning and Research at 741-8331 or through electronic mail at Marilyn.Illig@state.tn.us to resolve scheduling conflicts.

Small Ag	ency Meetir	ng Dates To Be Scheduled As Needed	H	ealth & So	cial Services Business Group
Thurs. May 27		Open for Meetings	Tues. Aug 10	8:30	Children Service's
_				10:00	Mental Retardation
				1:00	Mental Health
Thurs. June 3		Open for Meetings	Thurs. Aug 12	8:30	Health
				10:30	TennCare
				1:30	Human Services
Thurs. June 10		Open for Meetings			
	Educ	ation Business Group		Conoral G	overnment Business Group I
Tues. July 13	8:30	Education	Tues. Aug 17	8:30	Comptroller
		& Correction Business Group	Tucs. Aug 17	10:00	Secretary of State
Tues. July 13	1:00	Military		1:00	Treasury
Thurs. July 15	1:30	Board of Probation & Parole	Thurs. Aug 19	8:30	Veteran's Affairs
Tues. July 20	8:30	Correction		1:30	Finance & Administration
Tues. July 20	1:00	TBI			
Thurs. July 22	8:30	Safety			
				Gen	eral Business Group II
			Tues. Aug 24	8:30	Personnel
	Resource &	Regulation Business Group		10:00	General Services
Tues. July 27	8:30	Commerce & Insurance		1:30	Revenue
	10:30	Financial Institutions			
	1:00	Labor & Workforce Development			
Thurs. July 29	9:00	Environment & Conservation			
		ortation Business Group			
Tues. Aug 3	8:30	Agriculture			
	10:00	ECD			
	1:00	THDA			
Thurs. Aug 5	8:30	Tourism			
	1:30	Transportation			

# **Submission of the Information Systems Plan (ISP)**

The schedule for submission of the ISP has changed this year for some agencies. Small agencies will submit their plans by May 14, 2004 and large agencies by July 1, 2004 (See Appendix A). The ISP is submitted to the IT Planning and Research (ITPR) section in the Office for Information Resources, 17th floor William R. Snodgrass Tennessee Tower.

Agencies are responsible for creating a file of their Information System Plan in Adobe Acrobat format for placement on the Intranet. This file will be submitted to ITPR on CD or diskette, and ITPR staff will upload the file to the Intranet. Assistance will be provided to those agencies that currently do not maintain an agency web presence, as well as any assistance needed with Adobe Acrobat conversion.

The Information Systems Planning package should include the following:

## Two printed copies of the ISP

- One printed copy unbound.
- One printed copy should be bound in a metal ringed binder. <u>Please number all pages of the plan</u>. The Cost Benefit Analysis pages will print the project number if the file is saved with the project number according to the CBA Guidelines. Also, the spreadsheet will print the sheet title (Initial Costs, Operational Costs) and page numbers if the CBA print setup is not changed.
  - Each Chapter and each technology project in Chapter Four should be tabbed.

#### Also, a diskette or diskettes or CD that contain the following:

Provided in Word Processing or Spreadsheet format:

- One file of the entire plan <u>excluding</u> spreadsheet files. Do not submit the plan broken down into files by chapters. The word processing file used within the agency to print the plan in Microsoft Word should be copied to the diskette.
- Cost Benefit Analysis files. All Cost Benefit Analysis documents should be submitted as individual spreadsheet files. Please name the files with the project number (i.e., C002D01.xls).
- Project Summary Spreadsheet.
- GIS Infrastructure Template
- IT Disaster Recovery System Backup and Platform Inventory Spreadsheet
- Desktop Equipment Replacement Spreadsheet
- Summary Information for the Statewide Plan. A diskette containing the updated information for the Agency Mission Statement, Business Strategy Goals, Technology Strategy Goals, Planned Applications, and last year's Achievements used in the 2003 Statewide Information Systems Plan.

#### **Provided in Adobe Acrobat format:**

- One file of the entire plan including spreadsheet files in Adobe Acrobat format. Please submit files exactly as you would for upload to the Intranet. The Adobe file should contain a Table of Contents created in the Bookmark Section of Adobe Acrobat for easy access to all Chapters, Projects and CBAs. Please call Marilyn Illig (741-8331) to obtain assistance or clarification with Acrobat conversion.
- One file of the agency's Strategic Business Plan. (If a hyperlink is provided in Chapter One to the agency Strategic Business Plan, this file will not be necessary.)

**Diskette Etiquette**: Please label each diskette with the agency name, the names of the files, the file format (Word, Excel, PDF, etc.) and the name and phone number of a contact person to answer questions concerning the files.

# **Schedule of Major Events**

Activity	Scheduled Date
Intranet Publication of 2004 Planning Guidelines	March 5, 2004
Agency Meeting to discuss ISP/CBA Changes and receive planning packets	Thursday, March 11, 2004
ISP Training Classes (How to develop an ISP and	Mid March 2004 (exact dates TBD based on Agency
CBA) and agency workshops (to review and	requests). The training calendar is available at
discuss projects)	www.state.tn.us/finance/oir/prd/train/cal.pdf
Small Agency ISP submitted to OIR (ITPR)	May 14, 2004
IT-ABC Review for Small Agencies	May 14 - June 16, 2004
Large Agency ISP submitted to OIR (ITPR)	July 1, 2004
IT-ABC Review for Large Agencies	July 1 - August 31, 2004-
State of Tennessee Information Systems Plan	November 2004
Published	

# **Changes This Year**

Highlights of the changes are identified in the following table. <u>Please refer to the individual chapters for details on each change</u>.

CHAPTER or TOPIC	DESCRIPTION
Information Systems Plan Due Date	Small agencies are due May 14, 2004 and large agencies are due July 1, 2004.  See Appendix A for agency assigned Planning Consultant and due dates.
Information System Plan Short Form	Small agencies can choose to use the new Short Form to submit their ISP. See Appendix K.
Chapter One: Executive Summary	Optional for small agencies. Small agencies should include their reference to the agency's Business Strategic Plan in Chapter Two, if they choose not to include Chapter One.
Chapter Two: IT Strategy	<ul> <li>Statewide Initiatives:         <ol> <li>Application Software Testing information has been requested.</li> <li>Planning for new technologies: If a need exists for any technology that is not listed, please identify that technology in this section.</li> <li>GIS section expanded to capture a description of the contribution agency GIS initiatives are making to the enterprise of State government.</li> <li>Changes/improvements made to the GIS Template.</li> <li>Moved background information supporting the development of the agency IT Strategy to Appendix J.</li> </ol> </li> </ul>
Chapter Four: Information Technology Projects	<ul> <li>Project Summary Spreadsheet: the process for producing and displaying the Funding Source Totals has been automated, and the first sheet has been renamed from "Template" to "Summary".</li> <li>1. For those projects with multiple funding sources, all FY05, 06, 07 Cost and Funding data should be keyed into the 3<sup>rd</sup> sheet: "Total Cost and Funding".</li> <li>2. Rows may be added to first and third sheets for multiple projects.</li> <li>3. The 1<sup>st</sup> (Summary) sheet obtains cost and funding data from the 3<sup>rd</sup> sheet and calculates and automatically displays the breakdown by funding source in columns J, L, and N on the "Summary" sheet).</li> <li>Small Project Template: The following note has been added to the Functional &amp; Technical Description: "For application related projects, please identify platform, development language and database."</li> </ul>
Chapter Four: Enhanced IT-ABC Process	Projects over \$500,000 <u>Total Initial Cost</u> must include the applicable documentation defined in the Enhanced IT-ABC process
Chapter Five: IT Disaster Recovery Plan	A summary of the status of the agency's accomplishments for 2003 disaster recovery goals is requested. Review and update of Disaster Recovery Template.
Project Proposal Supplement	The Project Proposal Supplement, or PPP, that is used by NIC and the WEB Committee for their review of Web projects has been eliminated from the Project Proposal template. As always, a Project Proposal and a CBA are required for all large projects.

# Cost Benefit Analysis Changes

- In order to prevent the Confidence Factor from being applied to actual costs reported for a project begun before 9/1/04 2004, a new cell has been added to the "Financial Summary" sheet, and the Confidence Factor calculations have been altered. Actual Cost figures will be protected by designating a year next to the label: "Cost Figures are Actual thru FY." The default is 2004.
- The following changes apply to the Initial Cost and Operational Cost Templates:
  - The sub-categories under costs for "Personnel" sheet have changed. They
    now include separate rows for: Project Management, Infrastructure, and
    Data Resource Management.
  - Separate rows have also been added to the Initial Cost Template under "Personnel" for Planning/Analysis/Design/Construction and Test Management.
  - Breakdown of each of the costs by resource: i.e. Agency, OIR, or Consulting service, is to be noted in the cell Notes or by adding rows.
  - 4. A new row: "Purchase of Database Software or License" is added to the Initial Cost Template under the "Software" category.
  - 5. The sub-categories under costs for "Hardware" on the Initial Cost Template have been revised slightly to better match current technologies.
  - 6. Two new rows have been added on the Initial Cost Template under "Security" as subcategories: "Hardware and Software", and "Services".

# **Summary of the Contents of the Plan**

SECTION	Approximate Length	DESCRIPTION
Cover Page	1 page	Show the document title, agency name, plan dates, and the signature of the agency head and the MAC Chair.
Table of Contents	As many pages as needed	Indicates the beginning page number location for each Chapter and any subheadings that the agency may wish to use. Includes a page number for each project in Chapter Four: Information Technology Projects in the table of contents. Projects should be grouped by plan year and identified by project number and name.  Example: Chapter Four: Information Technology Projects
Chapter One: Executive Summary (Optional for Small Agencies)	2-3 pages	Provides an executive summary of the agency's ISP, as well as the names of those responsible for developing the plan. The agency's Business Strategic Plan is referenced. If the Business Strategic Plan has been published on the Internet or Intranet, the agency will supply the URL for the plan. If the plan is not published, an Adobe Acrobat version will be submitted on a diskette along with the agency ISP.
Chapter Two: Information Technology Strategy	As Required	Identifies the agency's information technology strategy that supports the agency's business strategic plan. Also includes:  • Agency technology achievements for the past year  • MAC Information  • IT Organizational chart  • Graphic representation of Agency Technical Architecture  • Information relating to Statewide Initiatives
Chapter Three: Information Resource Management Issues	As Required	Provides a narrative of major information resource management issues faced by the agency.
Chapter Four: Information Technology Projects	As many pages as needed	Includes application development or acquisition projects as well as projects involving specific technologies including voice systems, GIS, imaging, communications, and connectivity projects. This Chapter consists of  • The Project Summary Spreadsheet  • Desktop Equipment Replacement Spreadsheet  • "In-progress" projects  • Year One:  Large Project Proposals with CBAs (incude Enhanced IT-ABC documents for projects over \$500,000)  Small Projects with Initial and Operational costs.  • Year Two:  Large Project Proposals with CBAs (incude Enhanced IT-ABC documents for projects over \$500,000)  Small Projects with Initial and Operational costs.  • Year Three:  Large Projects (CBAs optional)  Small Projects (optional)
Chapter Five: IT Disaster Recovery	As many pages as needed	System Back-up and Platform Inventory information is collected. Provides an assessment of the agency's IT Disaster Recovery (DR) readiness, status of 2003 Disaster Recovery Goals, and defines 2004 DR goals.

# **Chapter One: Executive Summary**

The Executive Summary provides an overview of the agency's Information Systems Plan. It should be no more than 2-3 pages. Imagine a snapshot of your agency's ISP on paper. A newcomer should be able to read the Executive Summary and gain an understanding of your ISP technology initiatives and priorities.

The Executive Summary should identify, at a minimum, the following information:

## Business Strategy

Briefly describe the agency's strategic direction in terms of the business and mission of the agency (Agency Strategic Business Plan). Please include an Internet/Intranet hyperlink to your agency's Strategic Business Plan. Should your agency not publish a Strategic Business Plan, please include an Adobe Acrobat version on diskette or CD.

# Information Technology Strategy

Summarize the agency's technology strategy

## Agency Information Technology Achievements

Highlight the major information technology achievements that have been accomplished by the agency during the last fiscal year

# • Major Information Resources Management Issues

Summarize major information resource management issues faced by the agency

# • Major Information Systems Projects

Highlight the major information systems projects planned over the next two years.

# IT Disaster Recovery Assessment and Goals

Summarize the agency's assessment of their IT disaster recovery readiness.

#### Names and titles of Who Developed the ISP

List the names and titles of staff that were instrumental in the development of the plan.

List the names and titles of staff that were involved in the review and approval of the plan if different from those who developed it. Reviewers and approvers typically include members of the agency's MAC, including the Chair whose signature will be on the cover.

# **Chapter Two: Information Technology Strategy**

Each agency should develop an Information Technology Strategy that identifies the agency's long-range goals related to deploying and managing technology and sharing information in support of the agency's strategic business plan. Once the agency's business strategy, the State Information Technology Strategy, the anticipated impact of new technology, and the strengths and weaknesses in the current environment have been reviewed a number of technology goals should be identified and support objectives and strategies developed. Goals should be applicable to the needs of executive management, technology users, and technology administrators.

#### Chapter Two should include:

- Agency Information Technology Strategy: Define the information technology objectives and strategies the agency will use to achieve its technology goals. The goals should describe where the agency wants to be in 5 years. (Appendix J contains reference material.)
- Agency Information Systems Achievements: Summarize the information technology achievements that have been accomplished in the agency during the last fiscal year. These can be completed projects or major milestones attained that are leading toward successful project completion.
- MAC Information: Please include the composition of the agency MAC, including names and titles of members. Also define the scope of MAC activities and frequency of meeting.
- Information Systems Organization: Define the current IS organizational structure or provide an IS organizational chart.
- **Graphic Representation of Technical Architecture:** Please include a graphic that represents the technical architecture used by the agency. The Application and Data Inventory System that maintains information on all state applications will be hyperlinked to these graphical representations.
- Statewide Initiatives: In addition to those items unique to each agency and in support of the State of Tennessee Information Technology Strategies, information on specific initiatives is also assessed during the planning process. This year we are requesting responses on the following initiatives:
  - Application and Data Inventory System: The Application and Data Inventory System contains information
    pertaining to agency applications. In addition, these applications identify instances where data sharing takes
    place. The completeness, accuracy and currency of the information is assessed annually in the information
    systems planning process. Please respond to the following questions:
    - 1. Are all agency production applications\* identified in the Application and Data Inventory System?
    - 2. Is the information recorded for each application accurate, complete, and up-to-date?
    - 3. Instances where agencies provide data to an organization outside the agency are recorded as data shares in the Application and Data Inventory System. Have all data sharing instances been recorded in the inventory?
    - 4. Is the information on data sharing accurate, complete, and up to date?

Contact OIR Data Resource Management for access to this system. The Intranet access for this system is <a href="http://www.intranet.state.tn.us/finance/oir/dba/dataInvSys\_prod.html">http://www.intranet.state.tn.us/finance/oir/dba/dataInvSys\_prod.html</a>. Query access is available to all Intranet uses; update access requires a user ID and password.

\*Production application applies to all applications that the agency depends upon regardless of the platform (host, distributed server or workstation) on which they execute.

2. **Application Software Testing:** Effective test management contributes to cost avoidance and efficiency of information systems development and maintenance. The exact numbers listed below are arbitrary, but the order of magnitude of the effect is not. The table demonstrates that the later in a project a defect is discovered, the more costly the repair. \*

<u>Phase</u>	<u>Cost</u>
Requirements	<del>\$</del> 1
High-Level Design	\$2
Low-Level Design	\$5
Construction (Code)	\$10
Unit Test	\$25
Integration Test	\$50
System Test	\$100
Post-Delivery	\$1000+

<sup>\*</sup>Blackwell Scientific Publications

Because effective testing can both reduce cost and schedule delays for software implementations, an assessment of software testing in agencies is part of this year's planning process. Agency assessment should be structured to specifically address the agency's testing strategy. Please Include:

- 1. a discussion of the organizational structure and staffing that supports your testing efforts;
- 2. what, if any, automated tools you use;
- 3. describe your testing environment in general processes, equipment and facilities;
- 4. provide the name of one person in your agency to serve in the role of an agency Application Software Testing contact. OIR Quality Assurance and Testing (QA&T) will periodically provide information to these contacts regarding training opportunities, statewide initiatives related to testing and other information to keep agencies current with the testing industry.

The State of Tennessee Testing Strategy is located at <a href="http://www.intranet.state.tn.us/finance/oir/qa/stds/app-dev/qc/TennesseeTestingStrategy.pdf">http://www.intranet.state.tn.us/finance/oir/qa/stds/app-dev/qc/TennesseeTestingStrategy.pdf</a> in the Quality Assurance and Testing Section.

#### Please note the following new information regarding Testing:

- Lines have been added to the Cost Benefit Analysis (CBA) to estimate the resources required to
  adequately support the testing efforts of proposed projects. These costs should be included
  whether it is a re-allocation of your internal staff's time, the use of an OIR test manager, or the use
  of a contractor.
- The use of an OIR test manager is a new billable service offered by QA&T. The hourly rate for that service is \$62 per hour. A large, complex system usually requires a full-time test manager (agency staff, OIR, or a contractor). Typically a test manager is responsible for coordinating the testing efforts of developers and business users, supervising the development of test documents and test cases, determining (with business users) what needs to be tested, reporting on testing progress, and managing the defect identification and removal process.

# 3. Planning for the following technologies:

From a statewide perspective, the need for technologies is always being assessed. If there is a need for a technology listed below that has not yet developed into a project proposal, please include a description of that need in Chapter Two. If that technology is addressed in a Chapter Four project, simply note that project number. Also, if you foresee a need for any technology that is not listed, please identify that technology in this section:

- User Authentication (beyond user ID and passwords) -VPN, tokens, smart cards, PKI, biometrics
- 2. Hand held devices Blackberry, PDA, Tablets, data collectors
- 3. Wireless connectivity wireless remote connectivity for laptops, Blackberry, PDA, Tablets, etc.
- 4. Securing email external to the State.
- 5. Internet filtering.

# 4. Geographic Information Systems (GIS)/Mapping Systems:

The State is seeking a better understanding of the scope and extent of GIS usage across all State programs and agencies. Agency narratives should be structured to specifically address the following areas and questions related to current GIS applications, digital mapping, or spatial analysis. (Agency GIS contacts have been briefed on the intent and details requested for this section.)

#### Contributions to the enterprise of State government:

GIS and spatial data applications contribute to the programmatic missions of many agencies. Agency responses will be compiled to show the relevance of GIS across the enterprise of State government.

- Describe the general uses for GIS and spatial data and its relevance to accomplishing the agency's mission. Be sure to reference all programmatic areas impacted or that use GIS and spatial data.
- Provide cost estimates for expenditures related to GIS. This should include IT-focused expenditures and expenditures in programmatic areas related to GIS and spatial data applications.
- Site specific instances in bulleted form for the current uses of spatial data. (For example: Digital parcel data used for property valuation.)
- Identify any spatial data set or combination of spatial datasets not currently in existence, which are
  relevant to the agency's mission and would enable the agency to better fulfill its mission in providing
  better or more efficient service with the existence of this dataset(s).

#### Personnel:

Describe the organizational structure for GIS or digital mapping support within the agency. How many full time equivalents (FTEs) are dedicated to GIS support, development, or analysis? How many users across the agency use GIS or mapping data or applications?

# GIS/IT Integration:

Describe the degree of GIS strategy integration within the overall agency IT strategy. Discuss current or future projects that will increase and develop this integration; address complementary agency initiatives and identify obstacles to this integration.

Identify whether an agency GIS implementation plan exists; if not, identify challenges or obstacles to establishing a GIS implementation plan.

# Infrastructure:

Address the hardware capacity, dedicated or shared, and specifications for hardware supporting GIS within the agency. Document median specifications for client PCs and servers by referencing manufacturer and platform number from statewide contract, or listing the processor speed, memory, and hard drive space of a typical machine. (Note: This effort does not seek an inventory of GIS equipment, rather, a median profile for equipment used by the agency.) Additionally, list hardware necessary to support GIS activities not available through statewide contracts. Include the number of licenses for software, broken down by geographic distribution. (See Appendix C - GIS/Mapping Software Format and Example. A template is provided for this information. In addition to an electronic copy on diskette, please include a printout of the completed GIS Mapping Software template in this section.)

#### Data:

Inventory the datasets used for GIS, digital mapping, or spatial analysis. (See Appendix C - GIS Mapping Data Format Definitions and Example. A template is provided for this information. In addition to an electronic copy on diskette, please include a printout of the completed GIS Mapping Data template in this section.)

# **Chapter Three: Information Resources Management Issues**

Chapter Three provides a forum for the discussion of major information resource management issues faced by the agency. Issues might include challenges involving organizational structure, facilities, communications, resources, legislative or federal mandates, or technology.

Agencies are encouraged to also include a discussion of solution(s) or recommendation(s) to address each issue that is identified. Over the past several years issues identified in this Chapter have driven initiatives such as IS College, LAN consolidation, major IT salary adjustments, the Co-op Program, the Equipment Replacement Fund, and the emphasis on Disaster Recovery Planning.

# **Chapter Four: Information Technology Projects**

This chapter consists of "in-progress" projects, new projects, major enhancements for Year One, Year Two, and Year Three, and Desktop Replacement projects. All projects involving developing or acquiring applications or other automated processes are detailed in the large or small project format, as appropriate. All agency projects are identified regardless of where development occurs or where the system is hosted (Application Service Provider -ASP) or resides. The projects presented in this chapter must be separated by plan year and included in the Table of Contents of the Information Systems Plan.

#### **Identification of HIPAA Compliance Requirements:**

If a project involves either remediation for HIPAA compliance or is a new system initiative that must be HIPAA compliant, please note "HIPAA Compliance Related" in the Business Objective in the Project Proposal or the Functional Description in the Small Project Format.

# Contents of Chapter 4 should appear in the following order:

- 1. Project Summary Spreadsheet
- 2. Desktop Equipment Replacement Spreadsheet
- 3. Microsoft Licensing Survey Spreadsheet
- 4. Year 1
  Large Projects with Project Proposal/CBA
  Small Projects
- Year 2
   Large Projects with Project Proposal/CBA
   Year 2 Small Projects
- 6. Year 3
  Large Projects Project Proposal/CBA optional
  Year 3 Small Projects optional

# Year One Project Considerations:

Information on year one projects should reflect accurate plan and cost information since the funding for these projects has already been established in the agency budget. The confidence factor would usually be high when completing the Cost Benefit Analysis document for Year One projects. Do <u>NOT</u> include any projects in Year One for which the funding is not in place. Projects funded during the year may be submitted to the IT-ABC at the time funding is approved. The agency budget or fiscal office must review and concur that all Year One projects are funded. The agency budget or fiscal officer should also keep the agency's F & A Budget Analyst informed on funding matters.

Previously approved projects that are in progress or scheduled to begin in Year One MUST be included in Year One of the Information Systems Plan (unless cancelled or delayed) utilizing the current CBA2004.xls workbook. If the CBA has previously been submitted, please review the new line items in the current CBA template and incorporate these lines into your CBA. The Project Proposal and Cost Benefit Analysis MUST also be updated to reflect any changes in the project since it was approved. The current project status and approval date of the project is to be included in the Project Proposal

#### **Year Two Project Considerations:**

Project information (Project Proposal and Cost Benefit Analysis documents) should be well defined. The MAC should have evaluated, approved, and set priorities for these projects. Projects that show "improvement" funding are those that the agency intends to submit as improvement items in the budget to be prepared in the fall. The funding source(s) for all Year Two projects should be clearly identified. The agency budget or fiscal office should verify the source(s) of funding.

## **Year Three Project Considerations:**

A Year Three project may be less defined since changes in priorities or anticipated funding for Year One and Year Two may have an impact on the third year. Since many Year Three projects will be revisited in next year's ISP as Year Two projects, less details and accuracy in these Project Proposals are anticipated. However, the more work that is done, the more meaningful the plan will become to the agency in projecting future technology plans.

#### 1. Project Summary Spreadsheet:

The Project Summary Spreadsheet must be included at the beginning of Chapter 4 to provide a summary of planned technology projects; costs and funding requirements should be identified in the Project Summary Spreadsheet. An example of this spreadsheet is provided in Appendix D and a template for agency use is provided on a diskette.

- Please Note: It is very important to follow the format in the Template provided for the Project Summary Spreadsheet. This Spreadsheet is used in Budget Hearings to identify all IT projects, their costs and funding.
- Include one entry for each in-progress project, new large and small projects, as well as Desktop Equipment Replacement projects. (NOTE: An "in-progress" project is a project that was previously approved and/or began prior to July 1 and will be in progress during Year One.)
- List the projects (in-progress, large, small and desktop equipment replacement projects) in priority order by plan year.
- Provide information for each project including project number, project name, and project priority. Priority should be determined across all projects within each plan year. Project numbers should be unique and not be duplicated throughout the plan. Project numbers should remain constant throughout the life of the project.
- Cost and funding information from each project are reflected as well as a breakdown of the three fiscal years of the plan. The spreadsheet should also total the costs and funding columns for all projects. The funding breakdown for all projects can be imemized using Worksheet 3 of the spreadsheet.

#### 2. Desktop Equipment Replacement Projects:

- Agencies will use the Desktop Equipment Replacement Spreadsheet to update their replacement needs
  for the installed base of equipment. The spreadsheet contains all Desktop Equipment Replacement
  Projects submitted by an agency in last year's ISP. Each agency will receive their data in spreadsheet
  format on a diskette. Each project should be reviewed, changes made, and the diskette returned with
  other ISP information. Duplicate project numbers may be used for Desktop Equipment Replacement
  Projects that span multiple years. (See Appendix F for an example.)
- The Desktop Equipment Replacement Spreadsheet must <u>not</u> be used for desktop equipment planned or purchased to expand the installed base.
- The sum of desktop devices presented in the Desktop Equipment Replacement Spreadsheet should equal the total installed base of desktop computer equipment in the agency.
- Desktop equipment includes desktop hardware, associated peripherals, laptops, Intel servers, printers, thin clients and hand held (PDA) equipment.
- The updated Desktop Equipment Replacement Spreadsheet can be converted to an Adobe
  Acrobat file and inserted into your formal Information Systems Plan after the Project Summary
  Spreadsheet. An updated spreadsheet is also returned on a diskette with other requested ISP
  information.

#### 3. The Microsoft Licensing Survey:

This spreadsheet requests information relative to the number of licenses of Microsoft Operating Systems and Microsoft Office. This data is needed for supporting the upcoming Statewide Microcomputer Software Contract Rebid and Select Agreement. In addition, this information will also provide valuable input to discussions on the potential merits of an enterprise licensing agreement for Microsoft products. See Appendix L for the Template instructions and example.

#### 4. Large Information Technology Projects:

- A large information technology project is one in which the total initial costs are anticipated to be \$100,000 or more.
- Several small technology projects grouped as one large project with total initial costs of \$100,000 or
  more. It is imperative that agencies view small projects from a broad perspective in an effort to
  determine if these projects are really pieces or parts of an even larger initiative or strategic direction. If
  so, they should be grouped and presented as a large project.
- A technology enhancement project with total estimated costs of \$100,000 or more. Projects that will
  require capital or improvement expenditures should be included in this category. Projects in this
  category should not include routine recurring maintenance efforts that are funded from the agency's
  continuance funds.
- Large projects over \$500,000 (total Initial Costs) are required to follow the Enhanced IT-ABC process. Complete details for this process can be found in the Power Point demonstration at the following URL <a href="http://www.intranet.state.tn.us/finance/oir/prd/enhance-orc.pdf">http://www.intranet.state.tn.us/finance/oir/prd/enhance-orc.pdf</a>. Appendix I contains a diagram of the project phases and project documents associated with each phase. For new projects, the following project deliverables are submitted to the IT-ABC along with a Project Proposal and CBA. Updates are submitted throughout the project phases.
  - 1. Requirements Definition Phase Signoff
  - 2. Technical Architecture High-Level Diagram and Description
  - 3. Major Business Process Flow
  - 4. Critical Success Factors
  - 5. Security Plan
  - 6. High-Level Work Plan
  - 7. Post Implementation Review

Templates and examples of these deliverables can be found on the IT Planning and Research Training/Templates site <a href="http://www.state.tn.us/finance/oir/prd/train.html">http://www.state.tn.us/finance/oir/prd/train.html</a>

# **Project Proposal**

The Project Proposal presents the business view of the project. Each large information technology project is summarized using this format. Complete instructions and a template are provided in Appendix C of the Cost Benefit Methodology document. Additional fields may be added to the Project Proposal format at the agency's discretion.

#### Cost Benefit Analysis (CBA)

The financial view of the project is presented in the Cost Benefit Analysis document. A CBA for each large project should be included behind the respective Project Proposal in Chapter Four. The costs and benefits of each large information technology project are summarized using the five components of the Cost Benefit Analysis document: Financial Summary, Risk Assessment, Initial Cost Assessment, Operational Cost Assessment, and Benefit Assessment. A complete and accurate Cost Benefit Analysis spreadsheet **MUST** be submitted for all Year One and Year Two large projects. Additional cost items may be added to the Cost Benefit Analysis format at the agency's discretion. Appendices D through H of the Cost Benefit Analysis Methodology document provides detailed instructions on completing each component in the Cost Benefit Analysis document. The Cost Benefit Analysis document pages do not have to be numbered in sequence with the rest of the plan

Note: All cost line items included in the cost benefit analysis template must remain. Rows may be added to clarify project cost breakdown, but please do not remove any of the cost item information provided in the template.

# 5. Small Information Technology Projects:

- A technology project in which the total initial costs are anticipated to be less than \$100,000. Any small project in which application software is being developed or acquired must be included in the plan. Small projects might include the purchase of new hardware or system software or upgrades to existing systems.
- Small Information Technology Projects will use the Small Project format provided in Appendix E. An
  example of a small project is also provided in Appendix E, as well as definitions of the fields used in the
  Small Project format. The Small Project format includes project description and detailed initial and
  operational costs. Each small project should also identify the business objective supported.
- No formal CBA is required for small projects; however, complete information on new and existing initial and
  operational costs of the project should be identified using the format shown in Appendix E. Additional fields
  may be added to the small project format at the agency's discretion.
- One project is defined on each Small Project format.
- Small projects should be prioritized among all projects within plan year 1, 2, or 3. For example, there should be only one "number one" priority whether that is a large, small, or a Desktop Replacement project for a plan year.

# **Chapter Five: Information Technology Disaster Recovery Plan**

The initiative to encourage each state agency to develop a comprehensive Information Technology (IT) Disaster Recovery Plan began in the 2002 Information Systems Plan. A tornado, building fire, water damage or other disaster that hinders access to systems, hardware, telecommunications, personnel, or recovery documentation can cause business disruption. One of the major responsibilities of an IT organization is to establish appropriate processes and procedures to ensure that the infrastructure, systems and applications can be recovered should the need arise.

Disaster Recovery Planning, like Information Systems Planning, is a continual process that requires monitoring as well as periodic testing in order to identify weaknesses and establish improved procedures. IT Disaster Recovery, for the purposes of Information Systems Planning, is defined as "establishing and implementing the processes and procedures that will enable the organization's ability to recover IT services."

# **Policy**

 ISC Policy 9.00 Disaster Recovery states, "Disaster recovery planning and the capability for implementing a recovery are required encompassing all critical data processing applications and their peripheral support activities".

#### **Goal of IT Disaster Recovery Planning:**

Be fully prepared to recover any application / system within a defined business recovery period.

#### Objectives for IT Disaster Recovery Planning in the 2004 ISP:

- Improve and enhance the State's IT readiness to respond to a disaster.
- Encourage each agency to assess their IT Disaster Recovery readiness.
- Encourage agencies in establishing goals to improve their IT Disaster Recovery readiness in Year 1
  of the ISP.

#### **Disaster Recovery Application Classification Definitions**

Applications are classified according to the business impact of the application to the agency using the following classifications: 1-fatal, 2-critical, 3-manageable, or 4-marginal. The classifications are defined as follows:

- **1. Fatal**: agency will be unable to complete required <u>legal obligations or business functions</u> if the application fails to operate. Many people would be affected, either inside and/or outside the agency. Potential liability exists.
- **2. Critical**: application will <u>continue to operate partially</u>; some calculations will produce incorrect results. Workarounds are short-term and highly invasive until the problem is resolved.
- **3. Manageable**: application will <u>continue to operate partially</u> and/or some calculations will produce incorrect results. However, workarounds are less invasive and could be sustained for a longer period of time.
- 4. Marginal: minor inconvenience, annoyance, or irritation. Business will continue to function.

#### **Assumptions for IT Disaster Recovery Planning**

For this planning effort, there are some basic assumptions to use when considering the agencies' IT scope of responsibilities:

- Physical facilities (office space, furniture, power, etc.) will be available.
- Telecommunications will be available.
- Data Center services will be available with mainframe and shared UNIX servers restored per OIR responsibilities.
- OIR will procure servers for the shared Windows environment and restore them at a cold site.
- Agencies are responsible for procuring Windows co-located servers. OIR will setup and restore those
  acquired co-located servers at the cold site.
- Server platforms may be available at the hot site for co-located UNIX servers. If not, OIR will assist agencies in procuring UNIX servers for the cold site. OIR will setup and restore these servers.

Four Disaster Recovery Steps To Be Included In The 2004 ISP:

- Step 1. Review and update the Systems Backup and Platform Inventory for all agency
  application systems. The applications should be reviewed and updated for changes that
  have occurred during the year, correct any errors in the data and complete any blank fields.
  The accuracy of this data is vitally important as it will be used to build the State's DR data
  repository.
- Step 2. Analyze the information gathered to assess the agency's ability to recover application systems.
- Step 3. Report on the progress made in meeting <u>each</u> of the disaster recovery goals the agency established in last year's ISP.
- Step 4. Develop goals to enhance IT Disaster Recovery readiness that the agency will accomplish within Year 1 of the ISP.

# Step 1. Systems Backup and Platform Inventory

The first task in completing the Systems Backup and Platform Inventory is to identify the appropriate classification for each of the agency's application systems:

- 1. Fatal,
- 2. Critical,
- 3. Manageable,
- 4. Marginal

The Systems Backup and Platform Inventory is provided in spreadsheet form in the planning packets. The format and field definitions of the form are provided in Appendix G. All agency applications should be identified on the template. The next task in completing the spreadsheet is to review and compile the information requested for each application system. For many of the application systems, OIR will have some shared responsibilities for certain processes that are components of disaster recovery such as data backups for application systems running on Data Center servers. OIR Data Networking staff will be available to assist agencies in completing information on application systems that reside on the host, Data Center shared or co-located servers, consolidated LAN servers or UNIX servers. An OIR Disaster Recovery Consultant will coordinate this assistance. The following contact information is also provided:

- Applications Classification Priority and Business Resumption Plans (OIR Disaster Recovery Consultant Larry Peck at 615-632-08920)
- Consolidated LANs (OIR LAN Administrator for the agency)
- Data Center shared and co-located servers (Bill Eubank, 253-4166)
- Data Center UNIX servers (Bill Eubank, 253-4166)
- Data Center Windows servers (Bill Eubank, 253-4166)
- Data Center mainframe systems (Mark Hancock at 741-1422)

A printout of the completed Systems Backup and Platform Inventory spreadsheet containing all agency applications must be submitted in Chapter Five of the ISP. In addition, the completed spreadsheet must also be provided on diskette.

# Step 2. Agency Self-Assessment

A general summary of the agency's assessment of their disaster recovery readiness is presented in this section of the ISP. The objective of this assessment is to identify areas of risks or weakness in the overall disaster recovery planning.

In preparing a summary the completed Systems Backup and Platform Inventory should be analyzed for missing or incomplete information. This evaluation should identify any potential changes to data and application backup procedures. The following questions are provided to assist in the analysis of the agency's readiness for IT disaster recovery:

After OIR has restored platforms for which they are responsible (mainframe, shared, co-located, consolidated, and managed application servers), are there documented recovery instructions for restoring any custom system software and the applications?

Are there documented processes to recover data since the last backup?

Are the application recovery instructions stored offsite?

Has the application's recovery instructions been tested?

Are data and application backups verified to be successful after each backup is made?

Are processes to restore communications, for which OIR is not responsible, been defined, documented and included in the application's recovery instructions stored off-site?

Are processes to restore servers, for which OIR is not responsible, been defined, documented and included in the application's recovery instructions stored off-site?

What are the current risks and weaknesses in the agency's Disaster Recovery processes?

No documented response to the questions above is requested. They are only provided to assist in the analysis.

# Step 3. Progress Report on Agency's 2003 IT Disaster Recovery Goals

Identify each IT disaster recovery goal defined in the 2003 ISP and report on the progress made to reach that goal.

# Step 4. Agency 2004 IT Disaster Recovery Goals

Specific 2004 IT Disaster Recovery Goals should be defined that can be accomplished during Year 1 of the ISP. These goals could be derived from the agency's self-assessment of their IT disaster recovery readiness (step 2), improvements needed in the current processes and procedures being utilized, 2003 goals not reached, or other identified areas for improvements.

The IT Disaster Recovery Goals should be objective and measurable. The goals should be numbered and submitted in this section of Chapter Five.

# Appendix A: ISP Due Dates and Account Assignments

**Account Assignments:** The IT Planning Consultant, identified by agency, is available for assistance throughout the planning process and year.

- GW Gladys Wolfe 741-4424 gladys.wolfe@state.tn.us
- JM Jack McFadden 741-5080 jack.mcfadden@state.tn.us
- MAI Marilyn Illig 741-8331 marilyn.illig@state.tn.us

# Small Agency List and Account Assignments ISP Due May 14, 2004

Administrative Office of the Courts (GW)

Alcoholic Beverage Commission (MAI)

Arts Commission (GW)

Attorneys General (JM)

Board of Education (MAI)

Commission on Aging (JM)

Commission on Children & Youth (MAI)

Corrections Institute (MAI)

Council of Juvenile & Family Court Judges (GW)

District Attorneys General (JM)

District Public Defenders (JM)

Health Services and Development Agency (MAI)

Human Rights (MAI)

Post Conviction Defenders Conference (MAI)

Registry of Election Finance (GW)

State Museum (MAI)

TN Advisory Com. on Intergovernmental Relations (JM)

TN Higher Education (JM)

TN Regulatory Agency (JM)

TN Rehabilitative Initiative in Correction (GW)

TN Student Assistance Corp.(GW)

TN Wildlife Resources Agency (JM)

# Large Agency List and Account Assignments ISP Due July 1, 2004

Agriculture (JM)

Board of Probation & Parole (MAI)

Children's Services (GW)

Commerce & Insurance (JM)

Comptroller (JM)

Correction (GW)

Economic & Community Development (MAI)

Education (GW)

Environment & Conservation (MAI)

Finance & Administration (MAI)

Financial Institutions (MAI)

General Services (GW)

Governor's Office

Health (GW)

Human Services (JM)

Labor & Workforce Dev.(GW)

Legislature

Mental Health (GW)

Mental Retardation (MAI)

Military (JM)

Personnel (MAI)

Revenue (JM)

Safety (JM)

Secretary of State (GW)

Tennessee Bureau of Investigation (MAI)

TennCare (GW)

Tennessee Housing Dev. Agency (JM)

Tourist Development (MAI)

Transportation (GW)

Treasury (JM)

Veterans Affairs (MAI)

# Appendix B: New, Unexpected and Revised Projects

# Memorandum

TO: ISM Directors

FROM: Bill Ezell, Chair

IT Assessment & Budget Committee

DATE: February 25, 2004

SUBJECT: Submission of New and Revised Projects

As you are aware, the IT Assessment & Budget Committee (IT-ABC) reviews the Information Systems Plans from all agencies during May through August. New, unexpected or revised projects that need to move forward either before or after the annual IT-ABC plan review may be submitted to the IT-ABC at any time. Projects that involve **only** the purchase of hardware or software from an existing statewide contract do not need to be submitted to the IT-ABC for review. Of course, the Budget Office will review the expenditure of funds as a part of their normal responsibility.

When you submit projects to the IT-ABC, please send one signed hard copy and one electronic copy to OIR IT Planning and Research, 17<sup>th</sup> floor of the William R. Snodgrass Tennessee Tower. We will make any additional copies that are needed. Be sure and include a cover memo with the name and telephone number of the person to be contacted in the event there are questions about the project proposal or cost benefit analysis.

We will strive to review and respond in as timely a manner as possible.

cc: Richard D. Rognehaugh, Chief of Information Systems
 Bill Bradley, Director Budget Division
 IT-ABC Members

# Appendix C: Statewide Initiatives - GIS Format & Definitions

The GIS/Mapping Software and Data formats provide information on the infrastructure and data utilized in GIS applications within the agency.

**GIS/Mapping Software Format and Example** 

Agency / Division			, , , , , , , ,		GIS/ Mapping Software	# Of Licenses	Platform
Comptroller – DPA	John Smith 741-9999	Nashville	ArcView 8.1	3	Win 2000		
TWRA	Jane Smith 741-9998	Nashville - Ellington	ArcInfo 8.1.2	2	Win NT		

**GIS / Mapping Software Definitions** 

Heading	Description
Agency / Division	Agency (and division, if appropriate) that uses the software.
Agency Contact	Individual to contact (including phone number) for more information.
Geographic Location	List the city where GIS/ mapping software is used. For multiple buildings in
	same city use City-Building format.
GIS/Mapping Software	List name of software (including version number)
# of Licenses	List number of licenses at this location
Platform	List operating system used for running software

**GIS / Mapping Data Example** 

Agency / Division	Agency Contact	GIS/ Mapping Applicati on Purpose	Level of Detail	Scope of Spatial Extent	Native Format	Create / Use	Ext. Req. / Source	FGDC Metadata
TDOT	John Smith 741-9997	TN Bridges	1:24K	Statewide	DXF	Use	None	Yes

**GIS / Mapping Data Definitions** 

Heading	Description
Agency / Division	Agency (and division, if appropriate) that uses, creates, or maintains the dataset.
Agency Contact	Individual to contact (including phone number) for more information.
GIS/Mapping Application Purpose	Primary use of the dataset.
Level of Detail	For vector data, state the scale of the dataset. For raster data, state the pixel resolution
Scope of Spatial Extent	Does the data set cover the entire state, select counties, or a smaller area? Be specific in detail.
Native Format	State the native data storage format (such as Arc/Info, DGN, or DLG)
Create / Use	Does the agency create the data or obtain and use the data?
External Requirements / Source	Are requirements placed on the data for its use and what is the source for the requirement?
FGDC Metadata	Does FGDC-compliant metadata exist for this dataset?

# **Appendix D: Example Project Summary Spreadsheet**

The following is an example Project Summary Spreadsheet. The purpose of the summary spreadsheet is to provide a concise summary of agency's planned technology projects' costs and funding requirements for the next three fiscal years. Projects (large, small, desktop replacement) must be listed in priority order within the respective plan year.

# **Project Summary Spreadsheet**

# **Department of Human Resources**

Date L	ast Rev	ised:	2/25/04
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	А	В	С	D	Е	F	G	Н	ı	J	K	L	М	N
1								!				!		
	Project Number	Project Name	Priority By Plan Year	Total Initial Cost	Total Operational Cost	Total Hard Dollar Savings	Total Soft Dollar Savings	Total Spent to Date (through	Three-Year Cost and Funding Requirement FY05, FY06, FY07					
2						•	3.	6/30/04)						
3									F	Y05	F'	Y06	F	Y07
4									Cost	Funding	Cost	Funding	Cost	Funding
5	Year 1 Project	s												
6	AB001	Case Management System	1	1,200,000	400,000	250,000	500,000	25,000	725,000	400,000 SDFA 150,000 F 175,000SC	450,000	100,000 SDFA 150,000 F 200,000SC	150,000	50,000 Savings 100,000SC
7	AB002	Fee Collection	2	225,000	70,000	0	150,000	75,000	150,000	SC	8,000	SC	8,000	SC
8	HD1234	Hearing Officer DTHW Replacement	3	22,940					22,940	F	22,940	F	22,940	F
9														
10												100 000 5		
11	AB101	Incident Tracking System	1	250,000	300,000			0			250,000	100,000 F 150,000 SC	35,000	SC
12	AB102	Case Record Imaging	2	500,000	450,000	100,000	358,246	0			500,000	200,000 SI 300,000 SC	50,000	25,000 Savings 25,000 SC
13														20,000 00
14														
15		ts												
16	PO 1234	Parole Officer Desktop Hardware Replacement	1	25,900									25,900	F
17														
18 19														
19													·	
20														
21		Total Cost & Funding		2,223,840	1,220,000	350,000	1,008,246	100,000	897,940	400,000 SDFA 172,940 F 325,000 SC	1,230,940	100,000 SDFA 272,940 F 658,000 SC 200,000SI	291,840	75,000 Savings 168,000 SC 48,840 F

# Appendix E: Small Project Format, Definitions, and Example

"Small Projects" includes projects in which the total initial cost is less than \$100,000. The format shown below should be used to identify all new small projects.

SMALL PROJECT									
Project Name:		Project Number: Project Fiscal Year:							
Sponsor/Contact:		Priority:							
Agency/Division:		Funding Source Initial Costs: Funding Source Operational Costs:							
Business Goal or O	biective:	T unumg Cource Open	ational Costs.						
Functional & Techn development langua	ical Description: (For applicati age and database)	on related projects, ple	ase identify platfor	m,					
		Initial Costs							
Cost Category	Description		Existing Costs	New Costs					
Personnel									
Software									
Hardware									
Security									
Communications									
Training									
		Totals:							
010.1		tional Costs	F 1:0: 0:1:	N. 0					
Cost Category Personnel	Description		Existing Costs	New Costs					
Software									
Hardware Replacement									
Security									
Communications									
Hosting Services									
		Totals:							
				T					
			I (New + Existing)						
		Total Operationa	I (New + Existing)						

Appendix E: (cont.) Small Project Format, Definitions, and Example

	Small Project Format, Definitions, and Example
HEADING	DESCRIPTION
Project Name	A brief name which describes this project
Project Number	An identification number that will permanently identify and track the project from
	planning to budgeting through implementation
Project Fiscal Year	The fiscal year in which the project will begin or did begin
Sponsor / Contact	The individual to contact for detailed information about the project
Priority	The priority of the project in relation to other projects, both large and small
Agency / Division	The division or section with programmatic responsibility for the project
Funding Source	Identify the funding source(s) for the total "new initial costs" and "new operational
(Initial and Operational Costs)	costs." There may be several funding sources for small projects. One or combinations of these sources should be indicated. The Systems Development Fund (SDF-A and SDF-H) is typically not available for projects under \$100,000.
	<b>State Improvement (SI)</b> is a funding source/budget item that the agency requests for the next fiscal year. Both administration and legislative approval is required. This funding source is only appropriate for Year Two projects.
	<b>State Continuance (SC)</b> indicates that the money for the system or technology already exists in the agency's base budget.
	FEDERAL (F) dollars are funds the Federal government has approved or is expected to approve for specific projects.  OTHER (O) dollars can come from a variety of sources. The agency needs to identify
	the source of these funds. Reserve funds are one type of "other" funding source.
	NOTE: When multiple funding sources are identified for a project, indicate the amount to be provided from each source in parentheses. For example, the New Initial Cost of \$75,000 is to be funded with \$50,000 in Federal funds and \$25,000 in State Continuance funds. The Funding Source(s) for New Initial Costs should be identified as follows: F (\$50,000), SC (\$25,000).
Business Goal or Objective	State the applicable business goal or objective that this project supports.
Functional & Technical Description	Provide a complete, yet brief functional and technical description of the project.  Projects that involve application development should include a description of the business need to be met by the project and the project's technical environment, such as hardware, software, and communications requirements (identify platform, development language and database). If a project is related to HIPAA, note that here.
Initial Costs	The initial cost section should be used to identify all new and existing initial cost components required to implement the project.
Operational Costs	The operation costs section should be used to identify all new and existing annual operational cost components required for on-going support of the project.
Cost Category	Identify any initial or operational cost category not listed. Operational cost category includes "Hosting Services" (application service provider or OIR shared or co-located servers).
Description	Describe each cost component that is identified, including how the cost was estimated and the source of the cost information.
Existing Costs	Calculate the initial or operational cost of each category identified. Enter the cost
New Costs	figure in the appropriate column, depending on whether the cost is existing or new.  Please note that OIR costs and contracted resources are always new costs not
	existing costs.
	New costs are costs incurred by the agency if the project is undertaken.    The project is undertaken   The p
	Examples of new costs include new personnel resources (new hires or
	contractors), hardware, software, communications, training, etc.  Existing Costs are costs incurred by the agency independent of whether the project is
	undertaken. Examples of existing costs would include current agency personnel, current software licenses or node connections, etc.
Totals	Calculate the total of the existing cost column and the new cost column.
Total Initial (New +	Add new and existing costs for Project Summary Spreadsheet information.
Existing	, , , ,
Total Operational (New + Existing	Add new and existing costs for Project Summary Spreadsheet information.

#### Information Systems Plan Guidelines - February 2004

# Appendix E: (cont.) Small Project Format, Definitions, and Example

Project Name: Automated Inventory
Project Number: ABC123
Project Fiscal Year: 2004/2005

Sponsor/Contact: Ima B. Counter
Priority: 2 of 7
Funding Source Initial Costs: SC (\$63,860)
Funding Source Operational Costs: SC (\$13,133)

# **Business Goal or Objective:**

Objective 2.3.4 The agency will implement a system to automate the logging and tracking of agency inventory not required to be stored in POST by June 30, 2005.

# Functional & Technical Description: (For application related projects, please identify platform, development language and database)

The agency has a need to automate the logging and tracking of inventory items not stored in POST. The system will be browser-based and will enable administrative staff in any of the 36 offices statewide to query or update information on items maintained in the system. An off-the-shelf inventory program will be purchased and customized by the vendor. The system runs on a Window 2003 server and uses Oracle DBMS and Windows.Net development tools. Users will have access to the system using a Web browser. Access to the system will be controlled through PIN numbers and USERID/Password authentication. The system will reside on OIR shared servers housed in the Data Center.

Initial Costs									
Cost Category	Description	Existing Costs	New Costs						
Personnel	Agency IS staff time for system analysis, customization, testing, and training. 200 man-hours @ \$25 per manhour (\$5000).  Agency Business Unit 150 man-hours @ \$20 per manhour (\$3000).	\$8000							
Software	Purchase of InveTech System 3.0 inventory software. Estimated @ \$15,000. Vendor staff 375 man-hours @ \$120 per man-hour\$45,000		\$60,000						
Hardware	Five (5) Platform 3 desktop PCs, with 17" monitors @ \$772 each		\$3,860						
Security	Provided by OIR Hosting Services								
Communications	Cabling 5 workstations @\$160 each		\$800						
Training	User training – 4hr @ \$25/hr	\$100							
	Totals:	\$8,100	\$64,660						
	Operational Costs								
Cost Category	Description	Existing Costs	New Costs						
Personnel	Agency IS Staff time for on-going support estimated at 200 man-hours per year @ \$25 per man-hour.	\$5,000							
Software	Annual Maintenance Cost		\$800						
Hardware Replacement	Funding to replace 5 workstations - 1/3 per year.		\$1,287						
Security	Provided by OIR Hosting Services								
Communications	LAN/WAN node charges for 5 new workstations @ \$84.86 per month.		\$5,092						
Hosting Services	OIR shared server cost (Oracle licenses, disk space, Web server hits). Estimated at Base Fee for 20MB disk space, 5 concurrent users @ \$550/mo.		\$6,600						
	Totals:	\$5,000	\$13,779						

Total Initial (New + Existing)	\$72,760
Total Operational (New + Existing)	\$18,779

# Appendix F: Desktop Equipment Replacement

<u>Desktop Equipment Replacement strategy and projects:</u> Each agency should develop a strategy for desktop hardware replacement. The overall goal of the strategy is to establish and maintain a recommended replacement cycle for all desktop hardware. The Desktop Equipment Replacement Spreadsheet defines the agency's replacement strategy.

Desktop Replacements projects should be prioritized within each plan year with funding source(s) identified for each. For planning and estimating purposes, each agency should look at their inventory and plan to replace its oldest hardware first. The agency 2003 Desktop Equipment Replacement Spreadsheet, as updated in February 2004, will be provided on diskette.

The Department of General Services POST system maintains the official records of equipment owned by the State. Desktop hardware is maintained on POST due to its classification as a sensitive item. Each agency may want to obtain a list of all their desktop hardware from POST to assist in this effort. Desktop Equipment Replacement projects include desktop hardware (i.e., monitor, keyboard, mouse, processor, PC hardware upgrades, tape drive, CD-ROM drive, laptops, Intel servers, handheld devices (PDA) and printers). New equipment purchases that are not replacements for current equipment should not be included in desktop equipment replacement projects. New equipment purchases should be identified in new small or large projects.

Equipment Replacement Fund (ERF): To aid in supporting the desktop equipment replacement efforts, the State has made some funds available to the Equipment Replacement Fund (ERF) solely for the purpose of replacing desktop hardware. This funding source for desktop hardware replacements is identified as ERF. Agencies may request this funding by identifying ERF as one of the funding sources in desktop equipment replacement projects. However, funds from this appropriation are limited for ERF. ERF funds cannot be used for non-Intel server replacements.

When funds from the ERF are used, <u>escrow payments</u> must be made into ERF in order to have funds available for the next replacement cycle for that equipment. When requesting funds from ERF, the source of funding the escrow payments should also be identified. An annual two percent (2%) administration fee will be applied to the annual escrow payment.

Recommended Replacement Cycles: The following replacement cycles are currently recommended:

Desktops
Laptops
Printers
Intel servers
Hand-held
4 Years
3 Years
3 Years
2 years

#### **Desktop Equipment Replacement Format**

An example of a Desktop Equipment Replacement Spreadsheet can be found at the following URL <a href="http://www.state.tn.us/finance/oir/prd/der-ss-ex.pdf">http://www.state.tn.us/finance/oir/prd/der-ss-ex.pdf</a>

# Appendix G: IT Disaster Recovery Format and Definitions

The System Backup and Platform Inventory collects important information to assist disaster recovery planning.

Field Name	Definition of Information Requested
Application System	Name of the application system
Classification	Classification of application system (1. Fatal, 2. Critical, 3. Manageable, 4. Marginal)
Backup Application Program files (.exe files)	Are application program files (execution) backed up? ("Y" or "N")
Frequency of Application Program files Backups	What is the frequency of the application program files (execution) backups? (monthly, weekly, when new configuration released, etc.)
Frequency of Data Backups	What is the frequency of application system's data backups? (monthly, weekly, daily, etc.)
Offsite Storage Frequency	What is the frequency of backup tapes being taken offsite? (daily, weekly, monthly, etc.)
Offsite Location	What is the location of the backups? (company, address)
Days to Recovery	What is the number of days the application system can be down without fatal or critical impact to the agency's business?
Hardware Platform	What is the hardware platform? (OS/390, UNIX, Intel server, workstation, etc)
Platform Type	M = Mainframe, U = Unix, I = Intel, O = Other
Operating System	What is the operating system <u>and</u> version number the application runs on? (Windows NT Server 4.0 service pack 6a, Windows 2000 service pack 1, etc.)
Database software	What is the database software <u>and version number the application uses?</u> (Oracle v8.0.5, Oracle 9.0.5, SQL Server 7.0, SQL Server 2000, etc.)
Other System software required	Identify other system software and version number that may be the application uses? (Crystal Reports 8.5, etc.)
Documented Recovery Instructions	Are the recovery instructions for this application system documented? ("Y" or "N")
Current and Up-To-Date Recovery Instructions	Are the recovery instructions for this application system current and up-to-date? ("Y" or "N")
Comment	Any comments you would like to make for clarification.
Date of Most Recent Recovery Test	Date of most recent disaster recovery test (mm/yy)
Date of Next Recovery Test Planned	Scheduled Date of Next Disaster Recovery Test (mm/yy)
Agency DR contact First and Last Name	Name of the agency contact relative to DR for this application or system
Agency Contact Phone Number	Phone number of the agency DR contact.
Application Dependencies	Does the application depend on other applications/databases to operate ("Y" or "N"). This dependency should be documented in the recovery plan for the application. For example, the Labor Distribution application has a dependency on the STARS application. This is indicated by a "Y" in this column.
Server Location	Building name, address and floor

# **Appendix H: Assistance Information**

Assistance in establishing accurate information and costs for inclusion in the Information Systems Plan and Cost Benefit Analysis can be obtained from the following sources:

# **Technical Assistance**

Technical Issues	Contact	Phone
Systems Development &	Mainframe - Sharon Sartain	741-7352
Support		
IT Program Management	Document Management/Imaging- Jonathan Lamb	741-5722
& eGovernment Web	Client/Server – Jeanne Smith	741-7122
Development	Web Based Application Development - Jeanne Smith	741-7122
	Internet/Intranet Support - Ed Oviedo	253-6832
	IT Program Management – Walter Mullen	253-2354
Fiscal Support	Systems Development Fund & Equipment Replacement Fund - Rose	741-5135
	Wathen	
	IT Pro Contract - Travis Johnson	741-5727
Communications and	Cabling Services - Jack Wilton	532-5652
Infrastructure	Voice Services - Gerald Davenport	741-5564
	Video Conferencing - Alan Atherton	253-6852
	Data Network Operations - Alan Atherton	253-6852
	SNA Network - Dave Harrell	741-1432
	Network Engineering/WAN Operations - Curtis Clan	741-9109
	Network Security Services – Larry Layten	532-4196
	LAN Operations - Vince Castro	741-4425
	Network Systems Support - Karen Taylor	741-4425
	UNIX/LAN Enterprise Tech Support - Bill Eubank	253-4166
	UNIX/LAN Agency (Co-located) Tech Support - Mark Hackney	741-8875
	Data Center Systems Project Management Support - John Gottfried	253-2203
	LAN/WAN Project Management Support - Steve Asper	741-1480
GIS	Mark Tuttle/Joe Sewash	741-9356 /
		253-4799
Data Resource Mgmt.	Rick Wells	741-7077
Portal	Chris Yeiser	741-5144
Quality Assurance &	Mary Frances Jones	253-3746
Testing		
Disaster Recovery	Van Moffatt	741-1436
	Larry Peck	532-0920
ISP/CBA Questions	Marilyn Illig	741-8331
	Leighanne Haynes	253-4781
	Jack McFadden	741-5080
	Gladys Wolfe	741-4424
Software Contract &	Donovan Morgan	532-6871
Computer Books		
Security	Security Policy - Anne Lovell	532-0244
	Security Administration - Mark Hancock	741-1422

# Appendix H (continued): Assistance Information

# Web Links to Helpful Information

ISP/CBA Guidelines and Templates: <a href="http://www.state.tn.us/finance/oir/prd/train.html">http://www.state.tn.us/finance/oir/prd/train.html</a>

Agency Information Systems Plans: http://www.intranet.state.tn.us/finance/oir/prd/orcreview/

ISP Planning Process: http://www.state.tn.us/finance/oir/prd/ispprocess.pdf

Software & Hardware Contracts: http://www.state.tn.us/finance/oir/con1.html

OIR Schedule of Billing Rates: http://www.intranet.state.tn.us/finance/oir/billing/

OIR Training Division: http://www.state.tn.us/finance/oir/training/

Technical Architecture: http://www.intranet.state.tn.us/finance/oir/ga/stds/intranet-only/arch/index.htm

Web Guidelines: http://www.state.tn.us/guidelines/

Portal Guidelines: http://www.state.tn.us/guidelines/pg.html

Application & Data Inventory System:

http://www.intranet.state.tn.us/finance/oir/dba/dataInvSys prod.html

State of Tennessee Information Technology Strategic Plan:

http://www.state.tn.us/finance/oir/strategic.pdf

State of Tennessee Testing Strategy: <a href="http://www.intranet.state.tn.us/finance/oir/qa/stds/app-">http://www.intranet.state.tn.us/finance/oir/qa/stds/app-</a>

dev/qc/TennesseeTestingStrategy.pdf

The IT Methodology Model:

http://www.intranet.state.tn.us/finance/oir/SDS/itm/WebPage/WebSite/ITMhome.htm

# Appendix I: Enhanced IT-ABC Process Chart

# Project Phase and Deliverables Submitted at the Completion of Each Phase

Phase Definition	Projects Over \$500,000	All Projects
1.141.41	Division	Black
Initiation	Phase I	Phase I
	PP/CBA	PP/CBA
Requirements	Phase II	Phase II (Potentially)
Definition	Hadatad DD/CDA	Undeted DD/CDA
	Updated PP/CBA Project Documents:*	Updated PP/CBA
	Requirements Definition Phase Signoff	
	Technical Architecture (High-Level Diagram/Description)	
	Major Business Process Flow	
	Critical Success Factors	
	Security Plan High-Level Work Plan	
Procurement	Phase III	Phase III (Potentially)
	He detect DD/ODA	Undeted BB/CBA
	Updated PP/CBA Updated Project Documents:	Updated PP/CBA
	Technical Architecture (High-Level Diagram/Description)	
	Major Business Process Flow	
	Critical Success Factors	
	Security Plan High-Level Work Plan	
Annual Review	Phase IV	Phase IV
	Updated Project Decuments	Updated PP/CBA
	Updated Project Documents: Technical Architecture (High-Level Diagram/Description)	
	Major Business Process Flow	
	Critical Success Factors	
	Security Plan	
Post Implementation	High-Level Work Plan	Phase V (Potentially)
12 Months from Initial Project	Phase V	Phase V (Potentially)
Implementation	Updated PP/CBA	
-	Updated Project Documents:	
	Technical Architecture (High-Level Diagram/Description)	
	Major Business Process Flow Critical Success Factors	
	Security Plan	
	High-Level Work Plan	
	Post Implementation Review (Additional)	
Exceptions:	Exception Phase	Exception Phase
<ul> <li>Project Cost exceeds 10%</li> <li>10% of approved cost</li> </ul>	Updated PP/CBA	Updated PP/CBA
Schedule slips more than	Mitigation Plan	Mitigation Plan
3 mos.		ayadon r ian
	vww.state.tn.us/finance/oir/prd/train.html	
	on - http://www.intranet.state.tn.us/finance/oir/prd/enha	nce-orc.pdf

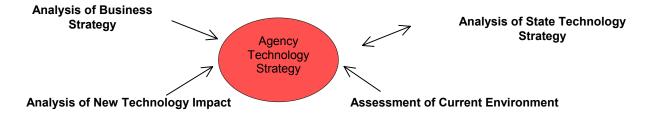
# Appendix J: Information Technology Strategy Reference Material

THE INFORMATION PROVIDED BELOW IS REFERENCE MATERIAL ONLY FOR ASSISTANCE IN THE DEVELOPMENT OF AN AGENCY INFORMATION TECHNOLOGY STRATEGY. NO RESPONSE TO THE FOLLOWING INFORMATION IS REQUIRED IN THE ISP.

The Information Technology Strategy should be developed based on the following:

- Analysis of the Business Strategy
- Analysis of the State of Tennessee Information Technology Strategy
- Analysis of New Technology Impact
- Assessment of the Current Environment

It should be clear how technology goals and objectives are identified and what challenges it addresses. Technology strategies do not exist in a vacuum but are developed to enable technology to support the business of the agency. Also consider the agency's efforts related to business process redesign, or reengineering. Agency activities related to redesign efforts or processes being redesigned and their correlation to the Technology Strategy should be analyzed. Focus may be on single business processes, cross-functional processes, agency-wide operations, or inter-departmental initiatives, whichever is appropriate. The Technology Strategy of the agency should define the technology goals to be accomplished over the next several years as well as the supporting objectives and strategies. Projects in Chapter Four are then developed to implement the strategy described in this chapter.



# **Analysis of the Business Strategy**

The first step in developing an information technology strategy is the analysis of the business strategy to determine the information needs required by the business units to achieve the business strategy goals. Consider how information technology could be used to accomplish the business strategy goals.

# Analysis of the State of Tennessee Information Technology Strategy

The second step in developing a technology strategy is to analyze the State of Tennessee Information Technology Strategy. This statewide view describes the information technology goals and objectives that support the mission and business objectives of state government..

Five goals are defined in the 2004 State of Tennessee Enterprise Information Technology Strategic Plan:

- Goal 1: Enterprise Planning & Architecture: Assist leadership in developing and implementing enterprise strategies for solving complex business problems: (i.e., core infrastructure business systems, application integration, consolidated state network.)
- Goal 2: Improve Government Service Delivery: Revolutionize government service delivery through innovation in the use of technology to produce efficiencies, reduce costs, and improve responsiveness and customer convenience.
- Goal 3: Cyber Security: Ensure State data and IT resources are protected from threats and vulnerabilities in an IT infrastructure that attains the highest level of reliability and availability.
- Goal 4: E-Government: Provide citizens access to reliable and responsive services and information electronically: (Government available anytime from anywhere).
- Goal 5: Information Technology Infrastructure: Ensure the IT infrastructure is in place to support state government.

The State of Tennessee Enterprise Information Technology (IT) Strategic Plan can be found on the State Web page under Technology/OIR/Planning (<a href="www.state.tn.us/finance/oir/strategic.pdf">www.state.tn.us/finance/oir/strategic.pdf</a>). This Strategic Plan is updated annually from the agency Information Systems Plans, State Strategic Business Plan, as well as state government and technology industry trends. Agencies should identify in their analysis of the State IT Strategy technology needs that do not appear to be met within the goals and direction of the Enterprise IT Strategic Plan. If an agency's technology strategy does not align with the State's IT strategy, those differences and the business reasons for those differences should be discussed in Chapter Two.

# **Analysis of New Technology Impact**

The third step in developing a technology strategy is to analyze new technology and its impact on the organization. New technology may offer opportunities to improve or redesign business processes. At the same time, new technology presents risks. Top management in organizations is often unaware of the critical changes in technology and the business opportunities that they present. Technology impact analysis is a process of assessing technological changes and relating these to business and management opportunities. Determine how new technology will be used and how it will impact the agency. Consider how the risk of using this new technology would be mitigated.

#### An Assessment of the Current Environment

The fourth step in developing a technology strategy is the assessment of the current environment. The assessment of the current environment should consider each of the following areas:

- · agency information systems achievements,
- the approach used by executive management in the agency to direct information technology,
- age, strengths and weaknesses of current application systems, staff experience, capabilities
  and potential growth areas, current technology infrastructure, and risks related to an aging
  workforce.
- significant policies and standards in place within the agency to better manage and apply
  information technology. Possible areas might include policies and standards covering project
  initiation, project development, project management, network management, data management,
  security, etc.
- the critical applications used within the agency that have significant strengths and/or weaknesses. Include aging legacy systems that present risks, particularly in the area of support and compatibility. This review should consider efficiencies in processing, maintenance costs, enhancement costs, and usability.

#### **Business Process Redesign Efforts**

Business Process Reengineering (BPR) can be a global, dramatic change that occurs when an agency radically redesigns work processes for quantum improvements in performance. Reengineering may also be thought of as the fundamental rethinking and redesign of business processes to achieve significant improvements in critical measures of performance, such as quality of service, responsiveness, and cost. Reengineering, or redesign, efforts may focus on a single business process, cross-functional processes, entire agency operations, or inter-agency initiatives.

Managers who believe that process changes are necessary and are willing to commit time, effort and resources to the process drive redesign efforts. If there are redesign efforts underway in your agency, you may want to analyze those activities as they relate to one, or more, of the four phases identified below. You may also want to consider specific examples of business processes being redesigned and their correlation to the Technology Strategy that has been developed.

- Phase I. Position for Change Position your agency; determine if changes are needed; decide why you must change and what your agency must become; develop focus and mobilize resources for process redesign efforts. During this phase, an organization will determine urgency and gain commitment, identify processes for change and assign owners, and develop a project scope and framework.
- Phase II. Assess the Existing Process Understand what the existing process does and why it is designed as it is; identify current process weaknesses; and establish new performance targets. This understanding, when put into context of customer needs and the required level of performance, provides the foundation for rethinking processes.

- Phase III. Redesign the Process Envision a new way of organizing and performing work to meet customer needs. Solicit input from stakeholders and customers to build the foundation for the new process. During this phase, an organization will identify potential innovations, develop a vision of the new processes, and identify incremental improvements.
- Phase IV. Transition to the New Design Develop business and technology strategies for transitioning to the new design. During this phase, transition plans will be created, technology projects will be identified, new systems will be developed and installed, and the new processes will be continuously evaluated for improvements.

# Appendix K: Short Form Information Systems Plan

# 2004-2005 Information Systems Plan

# Agency:

# MAC Members:

<u>Chapter 1</u> - Executive Summary: Optional for small agencies

<u>Chapter 2</u> - Information Technology Strategy: Small agencies should include their reference to their agency's Business Strategic Plan at the beginning of Chapter 2, if they choose not to include Chapter 1in their Plan.

Objectives for achieving technology goals:

Agency Achievements over last fiscal year:

Information Systems Organization:

Graphic Representation of Technical Architecture: See Appendix A

# Statewide Initiatives:

# Application and Data Inventory

- 1. Are all agency production applications identified in the Application and Data Inventory?
- 2. Is the Information recorded for each application accurate, complete and up-to-date?
- 3. Have all data sharing instances been recorded in the inventory?
- 4. Is the information on data sharing accurate, complete and up-to-date?

# **Application Testing Software:**

- 1. Discuss the organizational structure and staffing that supports your testing efforts:
- 2. What, if any, automated tools are used:
- 3. Describe your testing environment (processes, equipment and facilities):
- 4. Provide the name of one person in your agency to serve in the role of an Agency Application Software Testing contact:

# New Technologies – Do you foresee a need for:

- 1. User Authentication (VPN, tokens, smart cards, PKI)
- 2. Hand Held Devices (Blackberry, PDA, Tablets, data collectors, connectivity)
- 3. Wireless Connectivity (wireless remote connectivity for laptops, Blackberry, PDA, Tablets, etc.)
- 4. Securing email external to the State.
- Internet filtering.
- 6. Other technologies

# **GIS Mapping Systems**

- 1. Do you have any current or future plans to use GIS?
- 2. If "yes", see ISP Guidelines Chapter 2, Number 4, pg. 13 14.

GIS Template: Appendix B

# **Chapter 3** - Information Resources Issues:

# Chapter 4 - Projects:

Project Summary Chart - See Appendix C

Desktop Equipment Replacement Spreadsheet – See Appendix D

Large Projects w/ CBA (if applicable) listed by year – See Appendix E

Small Projects (if applicable) listed by year – See Appendix F

# **Chapter 5 - Information Technology Disaster Recovery Plan:**

Updated Disaster Recovery Template - See Appendix G

Analyze and briefly assess your ability to recover from a disaster

Report on progress of '03 - '04 goals

Define Disaster Recovery Goals for '04 - '05

# Appendix L: Microsoft Licensing Survey Instructions

Column A: Agency:	Enter Agency Name
Column B: Number of Desktops and OS's	Provide total number of Desktop (DT), of this Total Number, identify/breakdown the count by Operating Systems.
Column C: Number of Laptops & OS's	Provide total number of Laptops (LT), of this Total Number, identify/breakdown the count by Operating Systems.
Column D: Number of MS Office Licenses w/Version	Provide total number of Microsoft Office Standard licenses, of this Total Number, identify/breakdown the count by version of Microsoft Office Standard. Provide total number of Microsoft Professional licenses, of this Total Number, identify/breakdown the count by version of Microsoft Office Professional.
Column E: Number of MS Office with Current Maintenance (Upgrade Advantage or Software Assurance) Standard or Professional	Of the total shown in Column D, provide total number of Microsoft Office Licenses with current maintenance agreements (Upgrade Advantage or Software Assurance) for Standard and Professional.
Column F: Contact	Identify the Agency contact that manages Software Licensing
Column G: Comments	Available for any comments you feel are appropriate.

Should you have any questions about this spreadsheet, please feel free to contact Donovan Morgan, OIR Software Contract Project Manager at 532-6871 or email <a href="mailto:Donovan.Morgan@state.tn.us">Donovan.Morgan@state.tn.us</a>.

# Appendix L: Microsoft Licensing Survey Example

Column A	Colun	nn B	Colur	mn C		Column D			Column E				Column F	Column G
Agency	Numbe Deskt and O	ops	Numb Lapt and (	ops	Ni Standa	Lice ( w/ V	of MS Office enses ersion )   Professi	ional	Number of MS Office With Current Maintenance (UpgradeAdvantage or Software Assurance) Standard   Professional			Agency Software Licensing Manager/Contact/Ph	Comments	
Executive Agency													Name: John Doe 741-	
Number 1	DT Total =	1400	LT Total =	225	Total =		Total =	150	Total =		Total =	150	4444	
	Win 3.1		Win 3.1											
	Win 95	52	Win 95	175	Office 95		Office 95							
	Win NT	300	Win NT		Office 97		Office 97							
	Win 2000	998	Win 2000		Office 2000		Office 2000	50						
	Win XP	50	Win XP	50	Office XP		Office XP	100						
					Office 2003		Office 2003							